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**PHOTOGRAPHIC
INTERPRETATION
REPORT**

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**SUMMARY OF ACTIVITY
CHAPAYEVSK ORDNANCE
RESEARCH AND DEVELOPMENT RANGE
USSR**

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INSTALLATION OR ACTIVITY NAME Summary of Activity, Chapayevsk Ordnance Research and Development Range		COUNTRY UR
UTM COORDINATES NA	GEOGRAPHIC COORDINATES 52-59-40N 049-47-10E	
MAP REFERENCE US Air Target Chart, Series 200, Sheet 0165-16, scale 1:200,000		

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NEGATION DATE (if required) NA	
None	NPIC PROJECT 143311NG

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SUMMARY

1. An apparent function of the Chapayevsk Ordnance Research and Development Range in the USSR is the testing of large directional fragmentation warheads under dynamic conditions. Such warheads could be employed by either space or ballistic missile systems. This testing takes place at one of the several components of the Chapayevsk installation, the ballistic test facility, which consists of a dynamic fragmentation warhead test range, a possible test range, and an unidentified test facility. The unidentified test facility probably serves as a support area for the dynamic test range and is apparently used for static testing of inert components. Activity at this facility has involved the opening or separation process of large nosecone-shaped objects. Whether or not these objects are related to the fragmentation warhead test activity cannot be determined by analysis of available photography. If they are related, and if the objects are in fact nosecones or missile payloads, the observed activities suggest that the Soviets are testing a space weapons system utilizing a large, high explosive, directional fragmentation warhead.

INTRODUCTION

2. Chapayevsk Ordnance Research and Development Range is in the Ural Military District of the USSR, approximately 3 nautical miles east-northeast of Chapayevsk. It is a large installation consisting of several widely scattered components. This report deals with only one of those components, the ballistic test facility (Figure 1), which consists of a dynamic fragmentation warhead test facility, a possible test facility, and an unidentified test facility. The apparent function of the dynamic warhead test facility is that of testing large, high explosive, directional fragmentation warheads under dynamic conditions. The unidentified test facility probably serves as a support area for the dynamic test range and appears to be used for static testing of inert components. The function of the possible test range has not been determined. These components of the Ballistic Test Facility are described in detail in the body of this report.

BASIC DESCRIPTION

Dynamic Fragmentation Warhead Test Range

3. The principal features of the dynamic fragmentation warhead test range are two rocket sled tracks (Figure 1). The longer track is 1,550 meters (5,080 feet) long and was constructed between December 1959 and August 1961. The shorter track is 250 meters (820 feet) long and was completed [redacted] No evidence indicates that the shorter track has ever been used. Two large instrumentation towers and two revetted probable range control buildings are situated along the longer test track at intervals of about one-third and two-thirds the length of the range.

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4. A fragmentation witness panel support framework consisting of two large towers connected by a lattice framework is at the terminal (southern) end and perpendicular to the longer test track (Figures 1 and 2). The distance between the two towers [redacted] and the framework [redacted] A smaller witness panel support framework is parallel to the test track at its terminal end. Together, these structures are used in evaluating the results of fragmentation tests in a dynamic mode, and this

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arrangement allows for measurement of both the forward and lateral fragment dispersion. Numerous monitoring towers are at random intervals near the witness panels. In operation, the weapon to be tested is apparently mounted on a rocket sled which is propelled down the track at a high speed. The weapon is detonated at some predetermined velocity or at a predetermined distance from the witness panels.

5. [] numerous witness panels were observed lying on the ground adjacent to the large support structure (Figure 2). These panels had been subjected to a test and were probably being assembled on the ground in the same order they were in on the vertical support structure. []

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[] The target was heavily damaged in the center over an area with a diameter of about 8 meters (26 feet). Light fragment damage covered [] of the length of the target.

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Possible Test Facility

6. A possible test facility is adjacent and parallel to the longer test track (Figure 1). It consists of two buildings [] which are connected by two prominent parallel ground scars. The function of this facility has not been determined.

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MAPS OR CHARTS

US Air Target Chart, Series 200, Sheet 0165-16, scale 1:200,000

DOCUMENT

1. Air Force. PAR-71-54() Foreign Technology Division Photo Analysis Report, *Chapayevsk Ordnance Research and Development Range-Ballistic Test Facility*, 19 Mar 71 (TOP SECRET CHESS RUFF) 25X1

REQUIREMENT

NPIC/IEG/WGD/SSB Project 143311NG

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